

## REMARKS

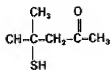
This Amendment is submitted in reply to the non-final Office Action dated June 25, 2009. No fee is due in connection with this Amendment. The Director is authorized to charge any additional fees which may be required, or to credit any overpayment to Deposit Account No. 02-1818. If such a withdrawal is made, please indicate the Attorney Docket No. 112701-713 on the account statement.

Claims 1-10 are pending in this application. In the Office Action, Claims 1-10 are rejected under 35 U.S.C. §103. Claims 7-10 are further rejected under 35 U.S.C. §102. In response, Claims 1 and 7-9 have been amended, and Claims 11-13 have been newly added. The amendments do not add new matter. The new claims do not add new matter. At least in view of the amendments and/or for the reasons set forth below, Applicants respectfully submit that the rejections should be withdrawn.

Applicants note that Claims 1 and 7-9 have been amended solely for clarification purposes. The amendments do not add new matter. The amendments are supported in the Specification at, for example, Abstract; page 1, paragraph 1; pages 1-2, paragraph 18; page 2, paragraphs 19, 22 and 25; page 6, paragraphs 46-47; Table 5.

In the Office Action, Claims 1-10 are rejected under 35 U.S.C. §102(b) as being anticipated by or, alternatively, under 35 U.S.C. §103(a) as being unpatentable over, GB 2116823 A to Soukup ("*Soukup*") or U.S. Patent No. 4,041,186 to Evers et al. ("*Evers*"). For at least the reasons set forth below, Applicants respectfully submit that the cited references are deficient with respect to the present claims.

For example, *Soukup* fails to disclose or suggest an aroma-providing substance comprising a straight chain C<sub>4</sub> – C<sub>5</sub> mercapto-alkanone or a mixture of two or more thereof as required, in part, by independent Claims 1 and 6-7. The Patent Office asserts that *Soukup* "teaches the addition of a mercapto-alkanone to coffee beverages as is claimed." See, Office Action, page 2, lines 14-15. However, contrary to the Patent Office's assertion, the present claims do not merely recite the addition of a mercapto-alkanone to a food or beverage but rather the addition of a straight chain C<sub>4</sub> – C<sub>5</sub> mercapto-alkanone or a mixture of two or more thereof. In contrast, *Soukup* is entirely directed to the branched alkanone 4-methyl-4-mercapto-2-pentanone:



See, *Soukup*, Title; page 1, lines 21-31, 40-46 and 58-60; page 2, lines 1-8. Nowhere does *Soukup* suggest adding a straight chain C<sub>4</sub> – C<sub>5</sub> mercapto-alkanone to a food substance. In fact, *Soukup* fails to suggest using any alkanone other than 4-methyl-4-mercapto-2-pentanone. As such, *Soukup* fails to disclose or suggest a straight chain C<sub>4</sub> – C<sub>5</sub> mercapto-alkanone in accordance with the present claims.

*Evers* also fails to disclose or suggest an aroma-providing substance comprising a straight chain C<sub>4</sub> – C<sub>5</sub> mercapto-alkanone or a mixture of two or more thereof. The Patent Office asserts that *Evers* “teach[es] the addition of mercapto-alkanones to foodstuffs.” See, Office Action, page 2, lines 16-17. However, contrary to the Patent Office’s assertion, the present claims do not merely recite the addition of a mercapto-alkanones to foodstuffs but rather the addition of a straight chain C<sub>4</sub> – C<sub>5</sub> mercapto-alkanone or a mixture of two or more thereof. Unlike the present claims, *Evers* is entirely directed to flavoring compositions with cyclic 3-furyl sulfides having the following formula:



See, *Evers*, Title; Abstract; column 2, lines 35-68; column 3, lines 1-20; Table 1; Claims 1-2. Nowhere does *Evers* suggest adding a straight chain C<sub>4</sub> – C<sub>5</sub> mercapto-alkanone to a food substance. In fact, *Evers* fails to suggest using any sulfur compound other than cyclic 3-furyl sulfides. As such, *Evers* fails to disclose or suggest a straight chain C<sub>4</sub> – C<sub>5</sub> mercapto-alkanone in accordance with the present claims.

Moreover, Applicants respectfully submit that one skilled in the art would understand that the branched alkanone of *Soukup* and the cyclic sulfides of *Evers* are distinguishable from the presently claimed straight chain C<sub>4</sub> – C<sub>5</sub> mercapto-alkanones. *Soukup* is entirely directed to flavoring foodstuffs with the compound 4-methyl-4-mercapto-2-pentanone. See, *Soukup*, Title; page 1, lines 21-31; page 2, lines 1-25. However, the present Specification teaches using that exact compound in addition to the claimed straight chain C<sub>4</sub> – C<sub>5</sub> mercapto-alkanones. See, Specification, page 2, paragraph 25; page 6, paragraphs 47-48; Table 5. Thus, one skilled in the

art would understand that a straight chain C<sub>4</sub> – C<sub>5</sub> mercapto-alkanone within the meaning of the present claims is distinguishable from the branched 4-methyl-4-mercapto-2-pentanone of *Soukup*. Furthermore, one having ordinary skill in the art would understand that a cyclic 3-furyl sulfide such as those disclosed in *Evers* is structurally distinct from the straight chain C<sub>4</sub> – C<sub>5</sub> mercapto-alkanones of the present claims. Therefore, the sulfur compounds of *Soukup* and *Evers* fail to render obvious the straight chain C<sub>4</sub> – C<sub>5</sub> mercapto-alkanones of the present claims.

Accordingly, Applicants respectfully request that the rejection of Claims 1-10 under 35 U.S.C. §102(a) or, alternatively, under 35 U.S.C. §103(a), to *Soukup* or *Evers* be withdrawn.

In the Office Action, Claims 7-10 are rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 3,773,524 to Katz et al. ("*Katz*"). For at least the reasons set forth below, Applicants respectfully submit that *Katz* is deficient with respect to Claims 7-10.

Independent Claim 7 recites, in part, a food or beverage that comprises a consumable component and at least one aroma-providing substance in an amount sufficient to increase the organoleptic properties of a coffee flavor in the food or beverage, wherein the aroma-providing substance comprises a mixture of two or more straight chain C<sub>4</sub> – C<sub>5</sub> mercapto alkanones. Despite the use of known sulfur compounds to improve the aroma of coffee products, there is a need for improved coffee aromas that can be provided in amounts sufficient to increase the organoleptic properties of a coffee flavor provided in a food or beverage. See, Specification, page 1, paragraph 16. Therefore, the present claims provide a food or beverage including an aroma-providing substance comprising a mixture of two or more straight chain C<sub>4</sub> – C<sub>5</sub> mercapto alkanones that is provided in an amount sufficient to increase the organoleptic properties of a coffee flavor in the food or beverage. Although some of the claimed straight chain C<sub>4</sub> – C<sub>5</sub> mercapto alkanones have been proposed as additives for providing meat flavors to foods, these products unexpectedly provide an improved coffee flavor in foods. See, Specification, page 1, paragraph 17. In contrast, Applicants respectfully submit that *Katz* fails to disclose or suggest every element of the present claims.

For example, *Katz* fails to disclose a food or beverage that comprises at least one aroma-providing substance in an amount sufficient to increase the organoleptic properties of a coffee flavor in the food or beverage as required, in part, by independent Claim 7. The Patent Office asserts that *Katz* discloses the addition of alkanones such as 2-mercapto-pentanone to foods.

See, Office Action, page 3, lines 3-4. However, *Katz* merely discloses the use of  $\alpha$ -ketothiols including 2-mercapto-3-butanone to impart a meat flavor to foods. See, *Katz*, column 2, lines 1-6, 13-15. *Katz* teaches that its  $\alpha$ -ketothiols “are particularly suitable for rounding out and improving the character of meat flavor compositions.” See, *Katz*, column 2, lines 13-15. Nowhere does *Katz* disclose or suggest using its compositions to generate a food or beverage having a coffee flavor. In fact, the entire disclosure of *Katz* fails to even mention the term “coffee.”

Applicants respectfully submit that the specific  $\alpha$ -ketothiol or combinations of  $\alpha$ -ketothiols used, along with the amounts used, can alter the type of flavor provided. For example, *Katz* expressly states that:

The quantity of  $\alpha$ -ketothiols or mixtures thereof utilized should be sufficient to impart the desired flavor characteristic to the product but . . . the use of . . . too large a quantity may unbalance the flavor or other organoleptic property of the product consumed. The quantity used will vary depending upon the ultimate foodstuff, or other consumable product; the amount and type of flavor initially present in the product; [etc.].

See, *Katz*, column 3, lines 45-60. All of the examples of *Katz* teach food compositions that have a chicken, beef or general meat flavor. See, *Katz*, column 4, line 32 – column 6, line 60. Nowhere does *Katz* teach or suggest using the claimed straight chain alkanones, alone or in any combination, in amounts sufficient to impart a coffee flavor to a food. As such, Applicants respectfully submit that *Katz* fails to disclose, either expressly or inherently, a food or beverage including an aroma-providing substance in an amount sufficient to increase the organoleptic properties of a coffee flavor in the food or beverage in accordance with the present claims.

Accordingly, Applicants respectfully request that the rejection of Claims 7-10 under 35 U.S.C. §102(b) to *Katz* be withdrawn.

Applicants further note that Claims 11-13 have been newly added. The new Claims are fully supported in the Specification at, for example, page 1, paragraph 17; pages 1-2, paragraph 18; page 2, paragraphs 19-20, 25-26 and 28-29; pages 2-3, paragraph 30; page 3, paragraph 31, lines 1-14. No new matter has been added thereby. Applicants respectfully submit that the subject matter as defined in the newly added claims is patentable over the cited art for at least substantially the same reasons as discussed above.

Specifically, with respect to Claim 13, *Katz* fails to suggest adding its flavors to a food product having a coffee flavor to increase the organoleptic properties of the coffee flavor in the food product. As discussed previously, *Katz* is entirely directed to foods having a meat flavor, such as chicken or beef, and fails to even use the term “coffee.” See, *Katz*, column 2, lines 1-6, 13-15; column 4, line 32 – column 6, line 60. Therefore, Applicants respectfully submit that *Katz* fails to teach or suggest a food having a coffee flavor as required, in part, by Claim 13.

For the foregoing reasons, Applicants respectfully request reconsideration of the above-identified patent application and earnestly request an early allowance of the same. In the event there remains any impediment to allowance of the claims which could be clarified in a telephonic interview, the Examiner is respectfully requested to initiate such an interview with the undersigned.

Respectfully submitted,

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Dated: October 2, 2009